

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
29 September 2005 (29.09.2005)

PCT

(10) International Publication Number
WO 2005/089940 A2

(51) International Patent Classification⁷: **B01J 31/00**

(21) International Application Number:
PCT/GB2005/000948

(22) International Filing Date: 11 March 2005 (11.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0406039.8 17 March 2004 (17.03.2004) GB

(71) Applicant (for all designated States except US): **SASOL TECHNOLOGY (UK) LIMITED** [GB/GB]; Sasol Laboratory, Purdie Building, North Haugh St Andrews, Fife KY16 9ST (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **TOOZE, Robert, Paul** [GB/GB]; c/o Sasol Technology, Purdie Building, North Haugh St Andrews, Fife, Scotland KY16 9ST (GB). **HANTON, Martin, John** [GB/GB]; c/o Sasol Laboratory, Purdie Building, North Haugh St Andrews, Fife, Scotland KY16 9ST (GB).

(74) Agents: **HILL, Christopher, Michael** et al.; Page White & Farrer, 54 Doughty Street, London WC1N 2LS (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: TUNGSTEN BASED CATALYST SYSTEM

(57) Abstract: A catalyst system including the combination of a source of tungsten; a ligand precursor containing at least N or O as a bonding atom to bond to the tungsten in the source of tungsten, the source of tungsten and the ligand precursor being selected to form an acid due to the bonding of the ligand precursor to the tungsten; and the catalyst system being characterized therein that it is substantially free of the acid formed due to the bonding of the ligand precursor to the tungsten; and that the molar ratio of the tungsten in the source of tungsten to ligand precursor is at least 1: 3/n where n is the number of bonds that the ligand precursor forms with the tungsten.



WO 2005/089940 A2